

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 52. (Canceled)

53. (Currently Amended) A method of treating one or more lesions in a vessel, the vessel having a main branch and a side branch branching from the main branch at a bifurcation, the method comprising:

providing a plurality of stent segments comprising a first, second, and third stent segment, each segment being not fixedly attached ~~unattached~~ with each other and selectively axially separable from each other when unexpanded;

positioning a delivery catheter in the main branch, the delivery catheter having an expandable member disposed thereon, wherein at least two adjacent segments of the plurality of stent segments are axially positionable over the expandable member and are in direct contact with one another when unexpanded;

axially separating a first stent from a second stent when unexpanded, the first stent comprising the first and second stent segments, and the second stent comprising the third stent segment;

radially expanding the expandable member thereby radially expanding ~~the first stent comprising the first and the second stent segments,~~ [[a]]the first stent, wherein expanding the first stent comprises expanding the first and second stent segments concurrently in the main branch;

positioning the delivery catheter in the side branch; and

radially expanding the expandable member thereby radially expanding [[a]]the second stent in the side branch, ~~the second stent comprising the third stent segment,~~ and

wherein the delivery catheter remains in the vessel between radially expanding the first and second stents ~~segments and the third stent segment.~~

54. (Previously presented) A method as in claim 53 wherein the plurality of stents comprise a fourth stent segment, the method further comprising deploying the fourth stent segment from the delivery catheter in the main branch or the side branch without removing the delivery catheter from the vessel.

55. (Previously presented) A method as in claim 53 wherein the first stent comprises a plurality of circumferentially and longitudinally arranged openings in a sidewall thereof, each opening of the plurality expandable to allow the deployment of a stent therethrough, the method further comprising:

positioning the delivery catheter through one of the openings; and
deploying a stent with the delivery catheter positioned through the one opening.

56. (Previously presented) A method as in claim 53 wherein the first and second stent each comprises a plurality of separable stent segments.

57. (Previously presented) A method as in claim 53 wherein the first stent has a different overall length than the second stent.

58. (Previously presented) A method as in claim 53 wherein the first stent is deployed before the second stent.

59. (Previously presented) A method as in claim 53 wherein the second stent is deployed before the first stent.

60. (Previously presented) A method as in claim 53 wherein the first and second stent each has a portion in the main branch.

61. (Currently Amended) A method as in claim 53 further comprising adjusting the length of the first stent before deploying the first stent while the delivery catheter remains in the vessel, wherein adjusting the length comprises selectively exposing a desired number of stent segments according to the length of the lesion to be treated.

62. (Currently Amended) A method as in claim 53 further comprising adjusting the length of the second stent before deploying the second stent while the delivery catheter remains in the vessel, wherein adjusting the length comprises selectively exposing a desired number of stent segments according to the length of the lesion to be treated.

63. (Previously presented) A method as in claim 53 further comprising dilating at least one lesion in the vessel using the expandable member on the delivery catheter without a stent disposed thereon before deploying at least one of the first and second stents.

64. (Currently Amended) A method of treating one or more lesions in a vessel, the vessel having a first branch and a second branch meeting at a bifurcation, the method comprising:

providing a plurality of stent segments comprising a first, second, and third stent segment, each segment being not fixedly attached ~~unattached~~ with each other and selectively axially separable from each other when unexpanded;

positioning a delivery catheter in the first branch, the delivery catheter having an expandable member disposed thereon, wherein at least two adjacent segments of the plurality of stent segments are axially positionable over the expandable member and are in direct contact with one another when unexpanded;

axially separating a first stent from a second stent when unexpanded, the first stent comprising the first and second stent segments, and the second stent comprising the third stent segment;

radially expanding the expandable member thereby radially expanding ~~[[a]]the first stent, the first stent comprising the first and the second stent segments,~~ wherein expanding the first stent comprises expanding the first and second stent segments concurrently in the first branch, a portion of at least one of the first stent segment or the second stent segment being disposed across the bifurcation;

positioning the delivery catheter in the second branch through an opening in a sidewall of the first stent; and

radially expanding the expandable member thereby radially expanding ~~[[a]]the~~
second stent, ~~the second stent comprising the third stent segment~~, and wherein at least a portion
of the third stent segment is disposed in the second branch,

wherein the delivery catheter remains in the vessel between radially expanding
the first and second stents ~~segments and the third stent segment~~.

65. (Previously presented) The method of claim 64 further comprising
dilating the opening in the sidewall of the first stent by expanding the expandable member on the
delivery catheter.

66. (Previously presented) The method of claim 65 wherein before dilating,
the opening in the sidewall of the first stent is I-shaped.

67. (Previously presented) The method of claim 64 wherein the first stent has
a first portion with a plurality of first sidewall slots and a second portion with a plurality of
second sidewall slots, the first slots being larger than the second slots.

68. (Previously presented) The method of claim 67 wherein the opening in
the sidewall of the first stent comprises one of the first slots, and wherein the first stent is
deployed so that at least one of the first slots is aligned with the bifurcation.

69. (Previously presented) The method of claim 64 wherein the first stent has
a different geometry than the second stent.

70. (Previously presented) The method of claim 64 wherein the first stent has
a different length than the second stent.

71. (Previously presented) The method of claim 64 wherein the first or
second stent comprises a plurality of separable stent segments.

72. (Previously presented) The method of claim 64 wherein the first stent
comprises a plurality of circumferentially and longitudinally arranged sidewall openings, each

opening of the plurality expandable to allow the deployment of a stent therethrough and at least one opening of the plurality of openings is aligned with the first branch of the vessel, the method further comprising expanding the at least one expandable opening using the expandable member on the delivery catheter without a stent disposed thereon.

73. (Previously presented) A method as in claim 56, further comprising:

selecting a first number of the separable stent segments for radial expansion, the first number of segments comprising the first and second stent segments and having a first length that substantially traverses a first lesion in the main branch; and

selecting a second number of the separable stent segments for radial expansion, the second number of segments comprising the third stent segment and having a second length that substantially traverses a second lesion in the side branch,

wherein the first number of segments is different than the second number.

75. (Previously presented) A method as in claim 73, wherein the step of

selecting either the first number or the second number of segments comprises moving a sheath disposed at least partially over the delivery catheter.

75. (Previously presented) A method as in claim 73, wherein the step of

selecting either the first number or the second number of segments comprises moving a pusher tube disposed at least partially over the delivery catheter.

76. (Previously presented) A method as in claim 71, further comprising:

selecting a first number of the separable stent segments for radial expansion, the first number of segments comprising the first and second stent segments and having a first length that substantially traverses a first lesion in either the first branch or the second branch; and

selecting a second number of the separable stent segments for radial expansion, the second number of segments comprising the third stent segment and having a second length that substantially traverses a second lesion in the other branch,

wherein the first number of segments is different than the second number.

77. (Previously presented) A method as in claim 76, wherein the step of selecting either the first number or the second number of segments comprises moving a sheath disposed at least partially over the delivery catheter.

78. (Previously presented) A method as in claim 76, wherein the step of selecting either the first number or the second number of segments comprises moving a pusher tube disposed at least partially over the delivery catheter.

79. (Previously presented) A method as in claim 55, wherein each of the plurality of openings are expandable to a diameter substantially equal to an expanded diameter of at least one of the first, second, or third stent segments when deployed in the vessel.

80. (Previously presented) A method as in claim 72, wherein each of the plurality of openings are expandable to a diameter substantially equal to an expanded diameter of at least one of the first, second, or third stent segments when deployed in the vessel.